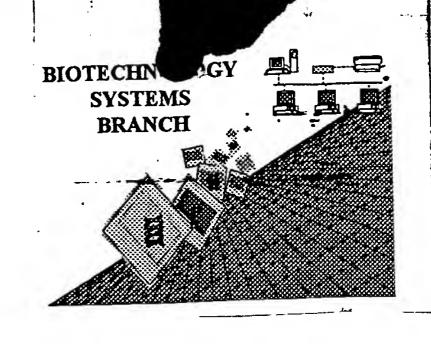
RAW SEQUENCE LISTING ERROR REPORT



13 Xurda 8/18/00

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/10/

Source:

Date Processed by STIC:

1632

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR FURTHER INFORMATION, PLEASE TELEPHONE MARK SPENCER, 703-308-4212.

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE <u>CHECKER</u> <u>VERSION 3.0 PROGRAM</u>, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

Checker Version 3.0

The Checker Version 3.0 application is a state-of the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 – 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address: http://www.uspto.gov/web/offices/pac/checker

		00/101423
\	ERROR DETECTED	SUGGESTED CORRECTION SERIAL NUMBER: ()9/101, 40)
1 ATTN:	NEW RULES CASES: PL Wrapped Nucleics	EASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3, as this will prevent "wrapping". RECEIVED
2	Wrapped Aminos	The amino acid number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3, as this will prevent "wrapping".
3	Incorrect Line Length	The rules require that a line not exceed 72 characters in length. This includes space ECH CENTER 1600/2900
4	Misaligned Amino Acid Numbering	The numbering under each 5th amino acid is misaligned. This may be caused by the use of tabs between the numbering. It is recommended to delete any tabs and use spacing between the numbers.
5 1	Non-ASCII	This file was not saved in ASCII (DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text so that it can be processed.
6	Variable Length	Sequence(s) contain n's or Xaa's which represented more than one residue. As per the rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the (ix) feature section that some may be missing.
7	Patentin ver. 2.0 "bug"	A "bug" in Patentln version 2.0 has caused the <220>-<223> section to be missing from amino acid sequence(s) Normally, Patentln would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies primarily to the mandatory <220>-<223>
8	_ Skipped Sequences (OLD RULES)	Sequence(s) missing. If intentional, please use the following format for each skipped sequence: (2) INFORMATION FOR SEQ ID NO:X: (i) SEQUENCE CHARACTERISTICS:(Do not insert any headings under "SEQUENCE CHARACTERISTICS") (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: This sequence is intentionally skipped
9	_ Skipped Sequences (NEW RULES)	Please also adjust the "(iii) NUMBER OF SEQUENCES:" response to include the skipped sequence(s). Sequence(s) missing. If intentional, please use the following format for each skipped sequence. <210> sequence id number <400> sequence id number 000
10	Use of n's or Xaa's (NEW RULES)	Use of n's and/or Xaa's have been detected in the Sequence Listing. Use of <220> to <223> is MANDATORY if n's or Xaa's are present. In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
11 \(\sum_{11} \)	Use of <213>Organism (NEW RULES)	Sequence(s) are missing this mandatory field or its response.
12	Use of <220>Feature (NEW RULES)	Sequence(s) are missing the <220>Feature and associated headings. Use of <220> to <223> is MANDATORY if <213>ORGANISM is "Artificial" or "Unknown" Please explain source of genetic material in <220> to <223> section. (See "Federal Register," 6/01/98, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of new Rules)
13	PatentIn ver. 2.0 "bug"	Please do not use "Copy to Disk" function of Patentln version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other means to copy file to floppy disk.

R. Shukldo RECEIVED

AUG 16 ZOTO

1632

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/101,423

DATE: 08/09 TECH CENTER 1600/2900 ever thoughout. TIME: 14:53:45

Input Set : A:\ES.txt

Output Set: N:\CRF3\08092000\I101423.raw

3 <110> APPLICANT: Rudland, Philip S.

Barraclough, Roger B. W--> 5 <120> TITLE OF INVENTION: Metastasis Inducing DNA=s

W--> 6 <130> FILE REFERENCE: WPT 0114 PUS

W--> 7 <140> CURRENT APPLICATION NUMBER: US 09/101,423

8 <141> CURRENT FILING DATE: 1998-11-27

9 <150> PRIOR APPLICATION NUMBER: PCT/GB97/00074

10 <151> PRIOR FILING DATE: 1997-01-10

W--> 11 <160> NUMBER OF SEQ ID: 6

ERRORED SEQUENCES

13 <210> SEQ ID NO: 1

14 <211> LENGTH: 1033 base pairs

15 <212> TYPE: DNA

16 <213> ORGANISM: Homo sapiens

18 <400> SEQUENCE: 1

E--> 19 cttccttggt gctctatgtc ttgcctctcc ccttctccag tcccattaag

20 ccataaccat

E--> 22 cttgacagac tctgggacag tcccctctgc tctcctgttg gcgcctgagt 120

E--> 25 ctgaggaccc ttcacgtagc ctcccatctg gatgacctag tagaagacgt 23 ccctttttgc

E--> 28 cacactcagg taactgagca gagctcagag atttaaagtg agtctgggga 26 gggaagttgt

240 E--> 32 ttgatctgct gccttaaaaa gccaattgga tgactaaccc agactattgt 29 gcctcgagga

E--> 35 gggaagtcac tagcatatct gatgggtcac atctgagaaa ggtttctagc 33 cactttaggt 360 36 agtggtggcc

E--> 38 ttgtgtgagc agcatggcgt gtatcatggt gtgcagcata ctcaggctgc 420 E--> 41 cgaggctctt cttcagtatt aggggaacca ctggtgttga acatggtcca 39 ttgcaacact

480 42 agaatacagt

E--> 44 catgtgagga gaatcccaat gcgtcaggag aaaacgagag tctgtgacct 45 ccattcttca

E--> 47 agatacagaa ttattcttgg actgtgtttt catgctcctt gtggatggga 48 gtgagtttac E--> 50 ttcaggttaa tcagcattgc ttactgttgg tattcaagta aatgcttaaa

51 ttatcctgga E--> 53 tatacctctg tgggaagcag gtttttgata catgcagctt gtccttgtga

E--> 56 ttgaactcaa gagaactttg ctcatgtgat ctttcttaac cgatggagta

57 gaaactgtct

E--> 59 gatgctctca ataaagttgg ctcttgcacg agacgttagt ctgtcctgtt 60 tatctgctcc E--> 63 attetteege teccaeggee tetacageae taaacceaee accgatagae

Does Not Comply Corrected Diskette Needec

Meec Sun Sunnaug on Evan Sunnaug Meet

sel dem I on Evro Jummary Sheet

Please ensure all bases are in lover-case letters, per new Sequence Ruber format. The CRF program converted letters to lover-case.

PATENT APPLICATION: US/09/101,423

DATE: 08/09/2000 TIME: 14:53:45

Input Set : A:\ES.txt

Output Set: N:\CRF3\08092000\II01423.raw

and day humeri idethiri and regional
gacgoccott ttaagggggt
'tocatgttt toacaattac
gggacagg gtoggggaaa
'gotoca ggagactate
ttoaa tgggtatogo
'toc aattggaaat
It ggoggagoag
c gggar E--> 66 actgacaaac atcaccagag gctcttaact gagattataa actgttacta 900 E--> 69 ggaatcgctc cccagaaaca taaacattta cttggagaac tcaagacccc 960 70 tttgtagaca 72 taactcccat ggt 74 <210> SEQ ID NO: 2 75 <211> LENGTH: 1058 base pairs 76 <212> TYPE: DNA W--> 78 (213) ORGANISM: 78 <400> SEQUENCE: 2 E--> 79 attgctgtga gcctattagc gacatttggt gacgcccctt ttaagggggt E--> 82 aatgggttga aattctgtgc cacaaacgct ctccatgttt tcacaattac E--> 85 tgtggtcagc agccagaatt tagggatgtg atgggacagg gtcggggaaa E--> 88 ggtaaaggaa agacagcacg ttaaagtcca aacagctcca ggagactatc E--> 91 acatcagacc atgaggagaa ttgatatcat tgtttttcaa tgggtatcgc E--> 95 ttccatctga ttaaaaataa ttactgctgg cactaaatcc aattggaaat 300 E--> 98 atttatcttc cacttcatgc tgctaccata tgcctgacgt ggcggagcag E--> 101 tcccgttctg ataaatagta ctttgtaaat atttggagac gggagctctg E--> 104 acacgtacaa accggcctgt ttatcatgtt cccgatagag gccctctttg 480 E--> 107 ccccaaaaca gtcaggatgc tgtgaatttc cttccatgaa gccttgttca E--> 110 ccattggagg aagcaggctg cactgtctac cacaagtggc actttccaaa E--> 113 atattggagc aagacatttt gctggctgac tggtgctgtg taagctgata E--> 116 tttattaaac tggcttttct ttgaacaccc cactcaagga aaaaaaaaca E--> 119 gacattattt ggagatgaag tetttataga gatgettaag tttaaacgag E--> 122 ccggctctat tccatttaat gaatggtgtc cctacaaagg aagaaactgg E--> 126 tgtacacttg tgtgtgtgtg agagacaacg tgaggagctg aagaggagca 900 E--> 129 agagaaaggc tgacccttat tcacactgag caaaccagtc atgtgtgggt 130 cgatagatga 1020 132 gagtatecce caagacteae acattegaac gettggte

panet eur fernat

134 <210> SEQ ID NO: 3

136 <212> TYPE: DNA

135 <211> LENGTH: 1008 base pairs

PATENT APPLICATION: US/09/101,423

DATE: 08/09/2000 TIME: 14:53:45

Input Set : A:\ES.txt

Output Set: N:\CRF3\08092000\I101423.raw

137 <213> ORGANISM: Homo sapiens

139 <400> SEQUENCE: 3

E--> 140 aggaccagag ttcacatccc atcaaatggc ccagaaggtt ttaatgctgt 60

141 cttttggccc

E--> 143 aggggcgaac tgcacacaca tgtgcacata cacttacaga gacacacatt 120 144 cagcagcata E--> 146 agaacacaat cacaaataaa aaaaatcttg aaaaatttta agctaaaatt

147 gttaagaaat E--> 149 aacatatata caatttttct ttattttttt aaagatttat ttatttaatg

240 150 tatatgagta E--> 152 cactgootet coetecagae atageagtae agggeategg ateceattae

153 agatggttgt E--> 155 gagccaccat gtggtttcac agatggttgt gagccaccat gtggtttcag

360 156 gaattgaact E--> 158 caggacettt ggaagageag teagtgetet taacetetaa geeatetete

420 159 ctgaccctta E--> 161 tatacaattt taatgctacg tacacacaac ttctctttcc tttaatggtt

162 gagatttttg E--> 164 tctggagaag taagaataaa ggagggaaag aacattgctt tcacattgca

165 ccagtgggaa E--> 167 cagcgtgttt aaagtaggaa tgccatgaaa tgactggcct gccttctcat

168 tactgttcct E--> 170 cccactcctc cttttaactg gagetccttt atctaattta ttagtttgac

660 171 gatacccagg

E--> 173 gttttcttct gttttgatct ttttaagaca gagactcacc atatagccct 720

174 ggctggcctg

E--> 176 aagctcacta tgtagaccag tctggccttg aactcaaagg agatctatct

177 gcttcctagt E--> 179 gctgggatta aaggcttgtg ctaccaagtc tggtctgagg ctttggagca

180 gcctcggttt E--> 182 tggccttctt taaggatctc taagctagca gtaagtagcc tagccatgct

183 gttgtaggaa

E--> 185 gttgttcgtt catcctggct ccagcacaaa ggcagtcact aaacgtcggc

960 186 ctcatttcat E--> 189 cagagetgaa tgcaaattce ttgtgetett cetgtgteet eetggaac

E--> 190 1008

192 <210> SEQ ID NO: 4

193 <211> LENGTH: 1088 base pairs

194 <212> TYPE: DNA

195 <213> ORGANISM: Homo sapiens

197 <400> SEQUENCE: 4

E--> 198 agttggggac acagcttgct tgattaagat gtttcttggg aaaaggagtt 199 aagcctaatg -> 201 atttccaatg gaaaggactg ctaattgggg aggcaatgtt gcttaattgg

202 gacacctgcg E--> 204 ggtaattaaa agetetetee cagtggeett teetgttttt ggetetggga

180 205 ggcgaaggca

E--> 207 ttgagaggga tgcaggcatt ctaagggctg gttcttggtt tctcccttcc

208 cctctgtcca

RECEIVED MRP 18 SOOG TECH CENTER 1600/2900

DATE: 08/09/2000

PATENT APPLICATION: US/09/101,423

TIME: 14:53:45

Input Set : A:\ES.txt

Output Set: N:\CRF3\08092000\I101423.raw

E--> 210 aactcagtga ggtatccctg tctgtgctgt ccttagagtg ccgtcctgag 300 211 gccttggtga E--> 213 gttaaggtct ctggatctga gctgcctcag ggaaacgcat gagctcattg 360 214 gaaaggggag E--> 216 aaccaggcaa aggtgttggc tgtgacctca gaattctgag gggcaaaggt

E--> 220 ctctcattat agagcaagtt tgagactggc ctgggaacaa aaatataaag 217 tcaaggctaa

221 tgagtgaggt E--> 223 catatgacag cacctgagga gtcctgtccc tagagatcat aaggacctgg

540 224 ctgctgggga E--> 226 cttgttgcag atggcacttt gtgtcgagag aggggacctg ccccagcatg

227 ggaggccctg E--> 229 gaagateete tggattaact gtgaacactg attgetgett tatacetgga 660

230 gttgtgctgt E--> 232 tatctggtac acatctgctg ggtgaatgag ttcatgggct ttatttcagt 720 233 gaggtattta

E--> 235 cctgaggaga aagaaggact ggtgccacaa agcacagctt ttaaatctgt

780 236 gggttgtgac E--> 238 ccattatgga ctatcataac tgagtgcagg tatcaagaat actttagcag

840 E--> 241 gatttttgaa tgcgcaacga ccaaaactga actcaaaaat caagcatggc 239 gtggtaaaaa

900 242 atggatcctg E--> 244 ggtgctcctg gaagcacttg cctttactgc attgtgcgac ttgacggtag

960 245 ccttggttct E--> 247 gaatgcacaa cacgtgggct ttgggctgca caggccacca cgccgtgcct

1020 248 gaaacacctc

E--> 251 agctcaggtt tgtggctatg tcctatgact tggacttact tttattgcac 1080 252 atataaatat 1088

254 tttcctgc

257 <210> SEQ ID NO: 5 258 <211> LENGTH: 960 base pairs

259 <212> TYPE: DNA

260 <213> ORGANISM: Homo sapiens

262 <400> SEQUENCE: 5

E--> 263 gagggggtgg tggcacagtt atgtttttgt aggaagggtt ccatgaacct

264 cagcagagct E--> 266 cgggttagaa atttaaaagc cctgagggga atttttttt taaatcgcta 267 tgaatctgac

E--> 269 atgagaaaaa cagatcagaa acgttcttgt gcttcagaaa aggacaagtg 270 tgtgagctaa

E--> 272 cagactgcac actggtgttc gaggcacatc tggatcacag gagcgtcaga 273 taatgtcccc E--> 275 aaaggtaaat gcatttgctt gcacagtacc gagtgtggtg gggggtgcct

276 acageceage E--> 278 ggttctcaac cttcctgatg cttcgaccct ttaatacagt gcctcatgct

360 E--> 281 ccccaacctt aaaattattt ttgttgctgt tcataactgt gattttgata 279 ctggtgacct

282 ctgttatgaa

E--> 284 ttgtaatata aataattttg aagaaagagg tttgccaagg gtttgagaac

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PATENT APPLICATION: US/09/101,423

DATE: 08/09/2000 TIME: 14:53:45

Input Set : A:\ES.txt

Output Set: N:\CRF3\08092000\I101423.raw

E--> 287 gccccacgtg gatggttttt cgtcatttgg ggtttttatg aggcagagtc 285 tgctgttcta 540 E--> 290 caggctagca gcctagaatg tgctacttag ctgaggaata accttggaac 288 ttatgtagcc 291 ttctgaggac E--> 293 tggagagact ggcttagtcc tcaagaaact ggaaatagct ggagtttggc E--> 296 ttccttttc ttcaaacctt ttctactctt tttccaccct gtcggccccc 720 297 taacactaaa E--> 299 taagaaagag aaaggggagc atagagggga aaagaaaccc ctgaataacg 780 300 tcagtagttg E--> 302 gcaaaggggg gtgacatatg ttgtcattag accacatcct ggtgattaag 840 303 gggagtcaag E--> 305 ttccttgggg caagtttgat ctttcgtgta acgatatcta atttcttctc 306 cctgttgctt E--> 308 cgtctttgtg aacaacgact tgataaccca caatggacca tcaaccaacc 309 aaccaaccat 311 <210> SEQ ID NO: 6 312 <211> LENGTH: 1090 base pairs 313 <212> TYPE: DNA 314 <213> ORGANISM: Homo sapiens 316 <400> SEQUENCE: 6 E--> 317 ttgtctctgg tgttacttgt tttcccattt ctgacagtgg tttgaccttc 318 tatacgcctg E--> 320 tgtgtcagga gtgctgtaga cctattttcc tgttttcttt cagccagtta 321 caggaacaga E--> 323 gtgttctact gtcagatgtg tagctgttcc tgtccactga ctttcaagct 180 324 gtctctgtgt E--> 326 gcaggaacca gaagggcctg tccctacttc tactgggccc ctacgcacag E--> 329 tggtgctagg tgttttcctc tagagcctga aatgtgggca gagagtagtc 327 ggggcctaga 330 tectetggtt E--> 332 toctaggtat gtottocoot otgaaggtot agototocot tocatgggat 333 atgggtgcag E--> 335 ggagctgttt gaccaggtcc tctcaaatcc gggtgcagtc tggaccgcag 420 336 gctcctgtag E--> 338 cttgcctgct gcaatcttcc cgcacccaga ggcacccaag tttcctcttg 339 ggccaaggat E--> 341 gtgggcaaag gtgggcagaa gtggcaatct ctcctgccct agcgtctcag 342 gattgccctc E--> 344 acttctgggc aatccgctct ctcttccaca gggtttggga gcagggagct 345 gtgggccggt E--> 348 atcaggcaaa ggtttgaggc aaccagttag aaactggaag tgtcaggtcc 349 cagaggaatt 660 E--> 351 ttgcctttgt gtgtcctgag tccaccaggc aggtcacttg gagcagaaaa 720 352 attggttttc E--> 354 ccctcggtct caggcctgaa gttgcacctc agggttggct ttcagctgta 355 cctgtggaaa E--> 357 gtatggtttt aaaaatctaa gatagctatc atgcagcaag gcttgtgtaa

RECEIVED Mig 78 sóga JECH CENTER 1600/2900

DATE: 08/09/2000

PATENT APPLICATION: US/09/101,423

TIME: 14:53:45

RECEIVED MR 185000

Input Set : A:\ES.txt

Output Set: N:\CRF3\08092000\I101423.raw

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358 aatgtctatt E--> 360 tggttccttt atgacttact tttgctgtac tgaggatcaa acctagggtc 361 tcaagcagtc E--> 363 atcacaattc tctgtcactg atccagetcc atttctattt tcttttgtcc

364 cgcgcgatct

E--> 366 ctcgccagca agaaaacacg ctagggacat acgaatcctt gctgcagcca

367 aaacttttat

E--> 369 tgaatcttaa ggagaagccc gcgcaccgga ctggcgcggt ttatatacac 1080

370 cctagcacag 1090

372 tgcatccaca W--> 374/M:\clients\W\WPT\0114pusa\sequence list with pg #s.wpd

E--> 375 sandy m. 7-21-00

E--> 3/6 shelly 07/24/00E--> 3/78 -14delete at end of file

DATE: 08/09/2000 VERIFICATION SUMMARY TIME: 14:53:46 PATENT APPLICATION: US/09/101,423

Input Set : A:\ES.txt

Output Set: N:\CRF3\08092000\I101423.raw

```
L:5 M:283 W: Missing Blank Line separator, <120> field identifier
L:6 M:283 W: Missing Blank Line separator, <130> field identifier
L:7 M:283 W: Missing Blank Line separator, <140> field identifier
L:11 M:283 W: Missing Blank Line separator, <160> field identifier
L:19 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:50 SEQ:1
L:19 M:112 C: (48) String data converted to lower case,
M:112 Repeated in SeqNo=1
M:254 Repeated in SeqNo=1
L:78 M:282 W: Numeric Field Identifier Missing, <213> is required.
L:79 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:50 SEQ:2
M:112 Repeated in SeqNo=2
M:254 Repeated in SeqNo=2
L:140 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:50 SEQ:3
M:112 Repeated in SeqNo=3
M:254 Repeated in SeqNo=3
L:198 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:50 SEQ:4
M:112 Repeated in SeqNo=4
M:254 Repeated in SeqNo=4
L:263 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:50 SEQ:5
M:112 Repeated in SeqNo=5
 M:254 Repeated in SeqNo=5
 L:317 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:50 SEQ:6
 M:112 Repeated in SeqNo=6
 M:254 Repeated in SeqNo=6
 L:374 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:5
 L:375 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:6
 L:375 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:6
 L:375 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:6
 L:375 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:6
 L:375 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:6
 L:375 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:1
 L:376 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:9
 L:378 M:252 E: No. of Seq. differs, <211>LENGTH:Input:1090 Found:1107 SEQ:6
```